TID/TSB-289-63 28 October 1963

MEMORANIUM FOR:

Assistant for Operations

SUBJECT:

Evaluation of 112A Photography

Mission No. Date Flown Camera Mumber Processed By 3750 13 Oct. 63 112 A Esstman Rodak

1. Original Negative:

The exposure ranges from insufficient during the first part of the mission to excessive at the end. Where the exposure is inadequate all detail is obliterated in cloud shadows. Where the exposure is adequate fine detail can be observed in both the high-lights and the shadows. Where the exposure is excessive high light details are obscured. The gross fog level indicates that the negatives received forced development which enhanced the underexposed areas but considerably degraded the overexposed areas. The resolution is very good except at the extreme ends of the format. The resolution is poor 0.5" from both ends of the format and transverse bars of varying width and density extend as much as 6.5" into the format from the take up end. Examples can be seen on frames 38, 62, 66 and 1134.

The imagery is degraded by any change in vehicle attitude. Frame 137 shows degraded imagery while the vehicle is in a 20° turn.

Both edges of the negative show traces of edge fog not accounted

for by the forced processing.

Diagonal streaks 0.1" wide are associated with all camera off-on positions. On the second to last frame before a camera off the diagonal line starts at the untitled edge and tapers away from the take-up end covering the width of the film. On the second frame after a camera on, the diagonal line starts at the untitled edge and tapers towards the take up terminating halfway through the format.

This anomalie can be used advantageously to determine off-on posi-

tions over unfamiliar or cloud covered terrain.

There is a repetitive minor scratch 0.2" from the take-up end at the titled edge throughout the entire mission.

SUBJECT: Evaluation of "B" Photography

Very fine scratches appear randomly and occur any distance up to 6.5" from the titled edge (Example: Frames 158-160, 1034-1035).

Rail scratches are present on the emulaton along both edges but do not enter the format.

Cresant shaped cinch marks appear randomly in frames 10, 49, 554, 555, and 1139.

The edges (titled and non titled) parallel to the major axis and the fiducial are not sharp or well defined.

There are minor emilsion defects (Frames 33, 148, 188, 189 and 789); minus density comets (617, 634, 725, 746, 835, 999, and 1016) and evidence of static discharges in frames 752 through 754.

The last 18" of film is totally fogged.

2. Positive:

The FI suitability is very good except where underexposed, over-exposed or degraded by veather. Although there is 55-60% overlap in exposures the stereo capability is considered poor due to insufficient angular displacement along the base line. Some degradation was observed in cloud shadow areas.

Clouds covered less than 10% of the mission. There are a total of

1140 frames.

Chief, Technical Intelligence Division

25X1A

Distribution:

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25X1A

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